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United States Government **Department of Energy**

memorandum

DATE: April 9, 2002

REPLY TO ATTN OF: Office of Environmental Policy and Guidance: Boulos: 6-1306

SUBJECT: Clean Air Act Notice of Acceptability and Data Availability of Substitutes for Ozone-Depleting Substances.

TO: Distribution

The purpose of this memorandum is to inform Department of Energy (DOE) program offices and field organizations that on March 22, 2002, the Environmental Protection Agency (EPA) issued a notice of acceptability and data availability in the Federal Register (67 FR 13272) on "Protection of Stratospheric Ozone: Notice 16 for Significant New Alternatives Policy Program." The notice is available at the Office of Environmental Policy and Guidance (EH-41) Home Page at: http://www.eh.doe.gov/oepa/rules/67/67fr13272.pdf.

Under Section 612 of the Clean Air Act, EPA established the Significant New Alternatives Policy (SNAP) program. SNAP's mandate is to identify alternatives to ozone-depleting substances (ODS) and to publish lists of acceptable and unacceptable substitutes. Comprehensive SNAP lists can be obtained through EPA's Stratospheric Ozone Protection Hotline at: 1-800-296-1996. Also, a complete chronology of SNAP decisions can be found at: http://www.epa.gov/ozone/title6/snap/chron.html.

The notice expands the list of acceptable substitutes for ODS under the SNAP program. The substitutes are identified and discussed for use in the major industrial sectors, including refrigeration and air conditioning. EPA also provides new information on the toxicity of acceptable substitutes used in solvents cleaning.

Appendix A of this notice provides a summary of acceptable substitutes for refrigeration and air conditioning including:

(i) chemical blends that are acceptable for use in new equipment as substitutes for CFC-13, CFC-113, CFC-114, and blends thereof in very low temperature refrigeration;
(ii) HFE-7000, which is acceptable for use in new and retrofit equipment as a substitute for: HCFC-123 in very low temperature refrigeration, and CFC-11 and CFC-113, in industrial process refrigeration and in non-mechanical heat transfer;
(iii) ISCEON 39TC, which is acceptable for use in new and retrofit equipment as a substitute for CFC-12 in centrifugal chillers, industrial process refrigeration, industrial process air conditioning, cold storage warehouses, and ice skating rinks; and
(iv) R-404A, which is acceptable for use in new and retrofit equipment as a substitute for HCFC-22 in industrial process refrigeration.

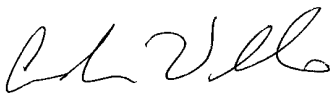
The ozone depletion potential of each of these chemicals and blends is zero, and their contribution to global warming will be minimized in each end-use through the implementation of the venting prohibition under Section 608(c)(2) of the Clean Air Act

(40 CFR Part 82, Subpart F). This Section and EPA's implementing regulations prohibit venting or release of substitutes for class I and class II ODS used in refrigeration and air-conditioning and require proper handling and disposal of these substances, such as recycling or recovery. Also, to reduce greenhouse gas releases, leaks of these substitutes should be promptly identified and repaired.

In addition, EPA has provided updated information in this notice concerning the formulation of the substitute NU-22 as an acceptable alternative for HCFC-22 in a variety of refrigeration and air conditioning end-uses.

Appendix B provides new information on acceptable substitutes for non-aerosol cleaning solvents, including the new exposure limits of 50 ppm, 400 ppm, and 100 ppm, respectively, for HCFC-225ca, HCFC-225cb, and the mixture of the two isomers. EPA believes these new exposure limits will be protective of human health and safety.

Questions concerning this memorandum should be directed to Mr. Emile Boulos of my staff at: emile.boulos@eh.doe.gov; 202-586-1306.



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